

ABSTRACT OF THE DISCLOSURE

A wire bonding apparatus with a bonding head that includes an ultrasonic transducer having a capillary at its tip end, piezo-electric elements that form a pair of complementary action type extension and retraction driving elements which cause the ultrasonic transducer to move with respect to a transducer holder, an impact detection sensor, and a Z motor which drives the transducer holder. The piezo-electric elements are arranged so that when one of them is driven to extend, the other is driven to retract. When the impact detection sensor detects that the capillary is lowered by the Z motor and comes into contact with a bonding object (semiconductor chip), the driving of the Z motor is stopped, and the piezo-electric elements are driven to the directions of extension and retraction in a complementary manner, thus swinging the ultrasonic transducer and moving the capillary upward.